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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,535	02/10/2004	Jae-Sung Lee	6161.0115.US	3220
23345	7590	06/14/2005	EXAMINER	
MCGUIREWOODS, LLP 1750 TYSONS BLVD SUITE 1800 MCLEAN, VA 22102			AL NAZER, LEITH A	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/774,535	Applicant(s) LEE ET AL.	
	Examiner Leith A. Al-Nazer	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 2 and 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/10/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following details must be shown or the feature(s) cancelled from the claim(s):

- a. the details of the display panel, including a plurality of first electrodes, a second electrode, a plurality of light emitting elements, and a plurality of transistors.
- b. the details of the display controller, including the current feedback system.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 6,121,950 to Zavracky et al.

With respect to claims 1 and 3, Zavracky teaches an image display comprising a display panel including a plurality of pixels arranged in a matrix pattern (90), a plurality

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of first electrodes (1065) individually formed corresponding to the pixels, a second electrode (1085) formed in common with the first electrodes, a plurality of light emitting elements provided between the first electrode and the second electrode and including a light emitting layer (column 14, line 47 – column 15, lines 37), and a plurality of transistors (column 14, lines 47-55) provided corresponding to the pixels and connected between the first electrodes and a power supply voltage line (161) for controlling the current supply to the EL elements; a scan driver (130a and 130b) for sequentially selecting respective pixel lines; a data driver (122, 159a, and 159b) for applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected; and a display controller (150) for using a current value (181 and 183) fed back by the second electrode of the display panel and externally input RGB data (Red 1, Green 2, and Blue 3 in figure 1; 141 in figure 4) to correct a white gray level of the RGB data and generate RGB display data, and for providing the generated RGB display data to the data driver, wherein the display controller determines an amount of emitted light on the corresponding screen according to the fed back current to generate a brightness control reference signal corresponding to the amount of emitted light, and controls the white gray level of the RGB data according to the brightness control reference signal to control the brightness of the display panel (column 10, lines 25-65; column 13, lines 20-30).

With respect to claim 7, Zavracky teaches an image display comprising a display panel including a plurality of pixels arranged in a matrix pattern (90), a plurality of first electrodes (1065) individually formed corresponding to the pixels, a plurality of second

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electrodes (1085) commonly formed for a plurality of groups defined by defining the first electrodes as the groups, a plurality of light emitting elements provided between the first electrode and the second electrode and including a light emitting layer (column 14, line 47 – column 15, line 37), and a plurality of transistors (column 14, lines 47-55) provided corresponding to the pixels and connected between the first electrodes and a power supply voltage line (161) for controlling the current supply to the EL elements; a scan driver (130a and 130b) for sequentially selecting respective pixel lines; a data driver (122, 159a, and 159b) for applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected; and a display controller (150) for using a current value (181) fed back by at least one second electrode of the display panel and externally input RGB data (141) to correct a white gray level of the RGB data and to generate RGB display data, and for providing the generated RGB display data to the data driver (figures 1 and 4), wherein the display controller determines an amount of emitted light on the corresponding screen according to the fed back current to generate a brightness control reference signal corresponding to the amount of emitted light, and controls the white gray level of the RGB data according to the brightness control reference signal to control the brightness of the display panel (column 10, lines 25-65; column 13, lines 20-30).

With respect to claim 8, Zavracky teaches a method for driving an image display, comprising sequentially selecting respective pixel lines; applying an RGB display signal corresponding to a pixel line of the display panel each time the pixel line is selected (figure 1); and using a current value (183) fed back by the second electrode of the

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display panel and externally input RGB data (141) to correct a white gray level of the RGB data and generate RGB display data, and to provide the generated RGB display data to a data driver (159a and 159b).

Allowable Subject Matter

5. Claims 2 and 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest one or more of the limitations found in dependent claim 2. Specifically, the prior art of record fails to teach or suggest the display controller comprising the combination of a current voltage converter, an operation controller, and a data voltage ratio controller.

Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent documents further show the state of the art with respect to image display panels and methods of driving image display panels:

- a. U.S. patent application publication no. 2005/0068270

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Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leith A. Al-Nazer whose telephone number is 571-272-1938. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LA


Don Wong
Supervisory Patent Examiner
Technology Center 2800